ABSTRACT OF THE DISCLOSURE

The multispectral image compressing method segments a multispectral image into a plurality of tile images, performs principal component analysis on the respective tile images to obtain for each tile image a plurality of sets of principal component vectors and principal component images for the multispectral image, determines from the plurality of sets, for each tile image, an optimum principal component number of sets of optimum principal component vectors and the corresponding optimum principal component images that optimally represent the image information about the multispectral image, whereby the image data for the multispectral image is compressed to the optimum principal component number, the optimum principal component images and the optimum principal component vectors for each tile image, as well as the relevant tile image information.